

CLAIMS

1. Tie rod with application of polymer composite with fibers reinforcement, comprising a stem provided at its ends with ball joints composed of a box, a bearing, a protection cover and a ball pin, said assembly having the function of fixing pieces and components of a mechanical system between themselves, providing to them angular and rotational movement, supporting the strains concentrated therein, wherein the stem of the tie rod is made of material comprising a polymer composite with fibers reinforcements, and combined with components of a metallic material provided in the ball joints.

10 2. Tie rod with application of polymer composite with fibers reinforcement, according to claim 1, wherein the ball joints are attached to the ends of the stem by chemical fixing that, due to the process of application, cure and drying, assure the resistance required to the objective to which they are intended, making the tie rod a tie rod with fixed length.

15 3. Tie rod with application of polymer composite with fibers reinforcement, according to claim 1, wherein the ball joints are attached to the ends of the stem by means of a thread in the body of the stem and in the ball joints boxes, making the tie rod a tie rod with variable length, the adjustment of its length and the locking of the assembly being provided by nuts provided in the threads of the stem and that are tightened against the boxes of the ball joints.